

### 3.3.6 Invasive Species

#### **Regulatory Setting**

On February 3, 1999, President William J. Clinton signed Executive Order (EO) 13112 requiring federal agencies to combat the introduction or spread of invasive species in the United States. The EO defines invasive species as “any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem whose introduction does or is likely to cause economic or environmental harm or harm to human health.” Federal Highway Administration (FHWA) guidance issued August 10, 1999, directs the use of the State’s invasive species list, maintained by the California Invasive Species Council to define the invasive plants that must be considered as part of the National Environmental Policy Act (NEPA) analysis for a proposed project.

#### **Affected Environment**

Information for this section came from the *Natural Environment Study* (August 2014) for the project.

Twelve (12) exotic plants occurring on the California Exotic Plant Council’s (Cal-IPC) Invasive Plant Inventory were identified throughout the project area. The invasive species identified in the project area with a high rating include giant reed (*Arundo donax*), Sahara mustard (*Brassica tournefortii*), red brome (*Bromus madritensis* ssp. *rubens.*), cheatgrass (*Bromus tectorum*) and Mediterranean tamarisk (*Tamarix ramosissima*). Moderate rated invasive species include ripgut brome (*Bromus diandrus*), shortpod mustard (*Hirschfeldia incana*), Bermuda grass (*Cynodon dactylon*), and foxtail barley (*Hordeum murium*). Limited rated invasive species include redstem stork’s bill (*Erodium cicutarium*), Russian thistle (*Salsola tragus*), and common Mediterranean grass (*Schismus barbatus*).

#### **Environmental Consequences**

##### **No Build Alternative**

There would be no change from existing conditions with the No Build Alternative.

##### **Common to All Build Alternatives**

The project has the potential to spread invasive species to adjacent native habitats in the BSA by the entering and exiting of construction equipment contaminated by invasive species, the inclusion of invasive species in seed mixtures and mulch, and the improper removal and disposal of invasive species so that seed is spread along the highway. All revegetated areas will avoid the use of species listed on Cal-IPC’s California Invasive Plant Inventory.

#### **Avoidance, Minimization, and/or Mitigation Measures**

In compliance with EO 13112, a weed abatement program will be developed to minimize the importation of nonnative plant material during and after construction. Eradication strategies would be employed should an invasion occur. At a minimum, this program will include the following measures:

- BIN-1:** Inspect and clean construction equipment at the beginning and end of each day and prior to transporting equipment from one project location to another during construction.
- BIN-2:** Minimize soil and vegetation disturbance to the greatest extent feasible during construction.
- BIN-3:** Ensure that all active portions of the construction site are watered a minimum of twice daily or more often when needed due to dry or windy conditions to prevent erosion due to wind to minimize seed dispersal during construction.
- BIN-4:** Ensure that all material stockpiled is sufficiently watered or covered to prevent erosion due to wind to minimize seed dispersal during construction.
- BIN-5:** Obtain soil/gravel/rock from weed-free sources during construction.
- BIN-6:** Use only certified weed-free straw, mulch, and/or fiber rolls for erosion control.
- BIN-7:** Revegetate affected areas adjacent to native vegetation with plant species approved by the District Biologist that are native to the vicinity after construction.
- BIN-8:** Avoid the use of species listed on Cal-IPC's California Invasive Plant Inventory for all revegetated areas after construction.
- BIN-9:** Monitor erosion control and revegetation sites for 2 to 3 years after construction to detect and control the introduction/invasion of nonnative species.
- BIN-10:** Outline eradication procedures (e.g., spraying and/or hand weeding) should an infestation occur; the use of herbicides will be prohibited within and adjacent to native vegetation, except as specifically authorized and monitored by the District Biologist.